

## XSTACK

### Key Features

- Four iSCSI ports per controller
- Up to 200K IOPS
- 900 MB/sec throughput
- Fully redundant and hot-pluggable design: RAID controllers, power supplies, fan modules, battery backup modules, and JBOD expansion
- Hardware iSCSI offloaded engine
- Green storage designs: auto disk spin-down, advanced cooling mechanism, and 80 PLUS energy-efficient power supplies
- Advanced data protection: RAID 6, 60, writable snapshot, and storage base replication
- Flexible volume management for multiple applications and environments: cloud storage, SQL, Exchange, surveillance, and file backup, e-mail, boot from SAN, virtualization (VMWare, Hyper-V, Citrix)
- High connection availability: load balancing and failover
- Capacity extendable up to 120 TB

## 2U-12 Bay IP SAN Storage



D-Link's xStack storage systems are designed for small and medium businesses seeking a cost-effective solution. They present a high-availability iSCSI SAN platform that supports services for applications demanding high throughput, scalability, and flexible storage planning.

### High Availability

DSN-6110/6120 storage systems are specially designed for high availability applications. They are equipped with fully redundant components for all major functions, such as RAID controllers, power supplies, fan modules, battery backup modules, and SAS JBOD expansion ports. Hot-pluggable, they are capable of providing uninterrupted services. The firmware includes support for RAID 6, 60, read-only or writable snapshot, Windows VSS, and volume configuration restoration. These advanced features help to reduce or eliminate any system downtime. Distinct from other systems in their class, the DSN-6110/6120 are able to upgrade firmware without going offline. Firmware images and volume handling are protected by the redundant RAID controllers. When one RAID controller is down or disconnected, the other RAID controller takes over its tasks immediately. The volumes and their related services are transferred seamlessly and simultaneously.

### Outstanding Performance

The DSN-6110/6120 systems have a maximum of 200,000 Input/Output Operations Per Second (IOPS) - higher than other storage systems in their class. Total throughput is a maximum of 900 MB/sec.

### Optimum Versatility

The optimized IOPS and throughput are capable of providing runtime-critical online services, such as cloud storage, SQL, Exchange, and high-end surveillance storage. Furthermore, with the iSCSI interface, DSN-6110/6120 storage systems are ideal for virtualization environments such as VMWare, Hyper-V, and Citrix. Users can install up to 32 OSes in the iSCSI system through the Boot-from-SAN feature. Using this feature, the multiple OSes/Servers can be managed easily and protected by D-Link's advanced data protection features. No system downtime will be caused by a single point of failure.

### Green Energy Savings

DSN-6110/6120 storage systems are equipped with D-Link Green features for saving power. A hard drive can be a very power-hungry component in a SAN. When properly configured, the power consumption of hard drives can be reduced to a minimum using the auto disk spin down feature. DSN-6110/6120 storage systems monitor environmental temperatures to optimize the cooling mechanism. The fan modules respond only when needed. The power supply modules are all 80 PLUS power efficient, providing a more favorable power conversion rate. When combined, these power-saving features help to greatly reduce energy consumption.



## 2U-12 Bay IP SAN Storage

### Technical Specifications

**Single Controller**

- DSN-6110

**Dual Redundant Controller**

- DSN-6120

**No. of Host Channels Per Controller**

- 4 x 1 GbE

**Expansion Enclosure**

- DSN-6020 series

**Cache Memory Per Controller**

- 4 GB

**No. of Hard Drives (SAS and SATA II)**

- 12

**Max. No. of Hard Drives (SAS and SATA II)**

- 60

**Power Supply**

- 2 x 500 W

**Fan**

- 2

**Green**

- Auto disk spin-down
- Advanced cooling mechanism
- 80 PLUS energy-efficient power supplies

**iSCSI**

- Hardware iSCSI off-load engine
- iSCSI jumbo frame
- Header/Data digest
- CHAP authentication
- Supports up to 32 multiple nodes
- Up to 128 sessions per controller

**RAID and Volume**

- RAID level 0, 1, 0+1, 3, 5, 6, 10, 30, 50, 60, JBOD, N-way mirror
- Up to 1024 logical volumes
- Up to 32 hard drives per volume group
- One logic volume can be shared by as many as 16 hosts
- Global and dedicated hot spare
- Write-through or write-back cache policy
- Online volume expansion
- Instant RAID volume availability
- Auto volume rebuilding
- On-line volume migration without system down time

**High Availability**

- Dual-active RAID controller
- Cache mirroring through high bandwidth channels
- Flexible RAID group ownership management
- Management port seamless take-over
- Online firmware upgrade, no system downtime
- Multi-path and load-balancing support (Microsoft MPIO, MC/S, Trunking, LACP)
- Storage-based Replication

**Advanced Data Protection**

- Writable snapshot
- Microsoft Windows Volume Shadow Copy Services (VSS)
- Configurable N-way mirror
- Online disk roaming
- Instant volume configuration restoration
- Hot-pluggable battery backup module (BBM)

**Management**

- Serial console
- SSH telnet
- HTTP Web UI
- Secured Web (HTTPS)
- iSNS
- S.E.S.

**Data Security**

- VLAN 802.1Q, 802.1p support

**Notification**

- E-mail
- SNMP trap
- Browser pop-up windows
- Syslog
- Windows Messenger

**OS Support**

- Windows; Linux
- Solaris
- Mac

**Virtualization**

- VMWare
- Hyper-V
- Citrix

**AC Input**

- 100-240 V ~ 7 A - 4 A 500 W with PFC (Auto Switching)

**DC Output**

- 3.3 V - 25 A
- 5 V - 32 A
- 12 V - 40 A

**Dimensions**

- 2U 19" Rackmount
- 442.8 mm x 500.6 mm x 88.0 mm (W x D x H)

**Operating Temperature**

- 0 to 40 °C

**Relative Humidity**

- 5 % to 95 % non-condensing



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